NWS FORM E-5 U.S. DEPARTMENT OF COMMERCE HYDROLOGIC SERVICE AREA:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL WEATHER SERVICE SAN JOAQUIN VALLEY - HANFORD , CA

REPORT FOR:

MONTHLY REPORT OF RIVER AND

FLOOD CONDITIONS MONTH: JULY YEAR: 2016

TO: Hydrometeorological Information Center, W/OH12x1 SIGNATURE: National Weather Service/Office of Hydrology 1325 East-West Highway #7116 Kevin Durfee Silver Spring, MD 20910 (In Charge of Hydrologic Service Area)

DATE: August 2, 2016

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts and hydrologic products issued (WSOM E-41).

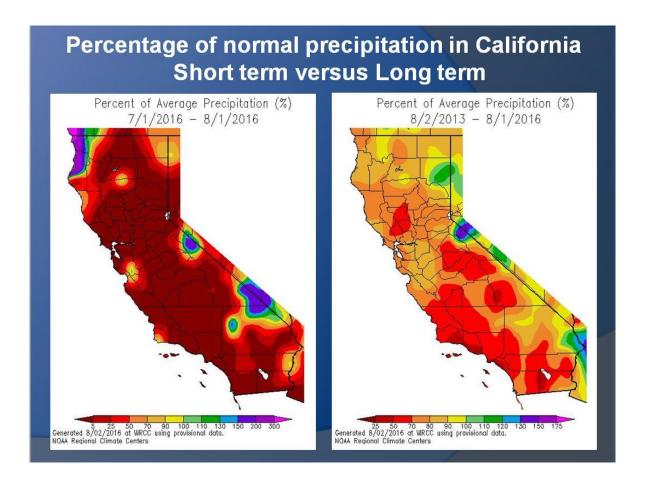
| X | An ${f X}$ inside this box indicates that no flooding occurred for the month within this hydrologic service area.

July was typically dry throughout the HSA. In fact, there were only a handful of days when convective activity occurred over the high Sierra and even on those afternoons thunderstorms were few and far between. A weather observer in Tuolumne Meadows remarked that July, 2016 was the driest July ever in Tuolumne with not even a drop of rain. The precipitation graphic at the end of this summary is a testament to just how dry the HSA was this July and how much of a long term deficit still exists over much of California. Temperature-wise, July averaged slightly above normal. Maximum temperatures of 100 degrees or higher were observed on at least 14 days this month in the San Joaquin Valley, lower foothills and the Kern County desert. Marine intrusions in the San Joaquin Valley were rare and relatively shallow and there were no bonafide northerly influxes of monsoonal moisture as well. In fact, the monsoon over the Desert Southwest, which normally materializes by mid July, was practically non-existent for most of the month.

In the broader scale, a prevailing southwesterly flow aloft prevailed over central California between a nearly stationary upper level trough of low pressure near the Pacific Northwest coast and a strong upper level ridge of high pressure over west Texas. At times, the ridge would build westward into California and bring triple digit heat to the San Joaquin Valley, lower foothills and the Kern county desert. This occurred during the first two days of July and again from the 14th through the 16th and for a third and more prolonged period from the 23rd through the 31st. On a few occasions, the upper level trough deepened along the Pacific Northwest coast and brought a cooler air mass into the HSA accompanied by gusty onshore winds through and below the passes on the west side of the San Joaquin Valley and in Kern county. As mentioned earlier, the onshore flow brought shallow intrusions of marine air into the San Joaquin Valley. This occurred for a period of about a week from July 5th through the 12th and again between the 18th and 21st. A particularly strong and deep marine push occurred during the 2nd weekend of July and kept afternoon temperatures below 90 degrees over the entire San Joaquin Valley on the 10th. In fact, it was the first time maximum temperatures were below 90 degrees in the San Joaquin Valley since the 18th of June. Winds that accompanied this cool change in the weather on the 10th gusted as high as 60 mph through and below Tehachapi pass. The winds, in addition to relatively low humidities and very dry fuels, elevated the fire danger over the higher elevations of Kern County during the 2nd weekend of July. This prompted the issuance of a Red Flag Warning for the Kern County mountains. Fortunately, no new fire starts occurred as a result of the extremely dry conditions. The Erskine wildfire, which was finally contained by July 2nd, ended up as the deadliest and largest wildfire so far this season in the central California interior. The Deer wildfire near Bear Valley Springs, relatively small compared to the Erskine fire, flared up during the 4th of July weekend and was completely contained by July 10th without any loss of lives or structural damage.

Water releases continued at many of the reservoirs during the month which naturally lowered water levels. By the beginning of August, the water capacity of the reservoirs ranged from just 10 percent of normal at San Luis Dam to 68 percent of normal at Friant Dam for an average water capacity of 29 percent of normal.

NO HYDROLOGIC PRODUCTS WERE ISSUED THIS MONTH.



cc:

W/OH12x1 W/WR2 CNRFC WFO HNX WFO STO